Abstract

A bone fixation apparatus and method are provided that allow a user to push bone pins into engagement with bones with more precision and accurate feel as to proper engagement and the clamping forces between the pins and bone over prior devices utilizing applicator guns and the like. Fine tuning of the clamping forces is also contemplated. Compact and highly ergonomic bone fixators are provided which allow the user to remain close to the pin application site during clamping of the pins onto the bone. Significant flexiblity is preferably incorporated by having two adjustably connected positioner bodies which can each mount a pin holder module releasably attached thereto. A fixation system with improved rigidity is also provided by way of independent clamping members for each of a pair of rod mounts on each pin positioner. The independent clamp members keeps their size to a minimum while allowing the angular separation of connecting rods secured in the rod mounts and spanning and interconnecting two fixators to be optimized, e.g. approximately eighty degree angular spacing, from a system stability standpoint.